

# SEQUENCE LISTING

<110> ADViSYS, Inc.

<120> Insulin-Like Growth Factor ("IGF-I") Plasmid Mediated  
Supplementation for Therapeutic Applications

<130> 108328.00172 - AVSI-0034

<160> 9

<170> PatentIn version 3.1

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<212> DNA

<213> artificial sequence

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<223> Nucleic acid sequence for the pAV2001 plasmid.

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 <212> DNA  
 <213> artificial sequence

<220>  
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<210> 4

<211> 153  
 <212> PRT  
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 <223> This is an IGF-I amino acid sequence.

<400> 4

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Phe Tyr Leu Ala Leu Cys Leu Leu Thr Phe Thr Ser Ser Ala Thr Ala  
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Gly Pro Glu Thr Leu Cys Gly Ala Glu Leu Val Asp Ala Leu Gln Phe  
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Val Cys Gly Asp Arg Gly Phe Tyr Phe Asn Lys Pro Thr Gly Tyr Gly  
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Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Asp Glu Cys Cys  
 85 90 95

Phe Arg Ser Cys Asp Leu Arg Arg Leu Glu Met Tyr Cys Ala Pro Leu  
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Lys Pro Ala Lys Ser Ala Arg Ser Val Arg Ala Gln Arg His Thr Asp  
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Met Pro Lys Thr Gln Lys Glu Val His Leu Lys Asn Ala Ser Arg Gly  
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Ser Ala Gly Asn Lys Asn Tyr Arg Met  
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 <211> 2237  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> Nucleotide sequence for the skeletal alpha actin 3' end.

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<210> 6  
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<212> DNA  
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<220>  
<223> Nucleic acid sequence of a human growth hormone 3' UTR.

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<210> 7  
<211> 215  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Protein sequence of vascular endothelial growth factor

<400> 7  
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Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala Glu Gly  
20 25 30  
Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln  
35 40 45  
Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu  
50 55 60  
Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu  
65 70 75 80

Met Arg Cys Gly Gly Cys Cys Asn Asp Glu Gly Leu Glu Cys Val Pro  
85 90 95

Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His  
100 105 110

Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys  
115 120 125

Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Lys Lys Ser Val  
130 135 140

Arg Gly Lys Gly Lys Gly Gln Lys Arg Lys Arg Lys Lys Ser Arg Tyr  
145 150 155 160

Lys Ser Trp Ser Val Pro Cys Gly Pro Cys Ser Glu Arg Arg Lys His  
165 170 175

Leu Phe Val Gln Asp Pro Gln Thr Cys Lys Cys Ser Cys Lys Asn Thr  
180 185 190

Asp Ser Arg Cys Lys Ala Arg Gln Leu Glu Leu Asn Glu Arg Thr Cys  
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Arg Cys Asp Lys Pro Arg Arg  
210 215

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<212> DNA  
<213> artificial sequence

<220>  
<223> Nucleic acid sequence of a plasmid pUC-18 origin of replicaiton

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aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg 180  
tttttccata ggctccgccc ccctgacgag catcacaaaa atcgacgctc aagtcagagg 240  
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cgctctcctg ttccgaccct gccgcttacc ggatacctgt ccgcctttct cccttcggga 360  
agcgtggcgc tttctcatag ctcacgctgt aggtatctca gttcgggtgta ggtcggtcgc 420  
tccaagctgg gctgtgtgca cgaacccccg gttcagcccc accgctgcgc cttatccggt 480

aactatcgtc ttgagtccaa cccggtaaga cacgacttat cgccactggc agcagccact 540  
ggtaacagga ttagcagagc gaggtatgta ggcggtgcta cagagttctt gaagtgggtgg 600  
cctaactacg gctacactag aaggacagta tttggtatct gcgctctgct gaagccagtt 660  
accttcggaa aaagagttgg tagctcttga tccggcaaac aaaccaccgc tggtagcggt 720  
ggtttttttg tttgcaagca gcagattacg cgcagaaaaa aaggatctca agaagatcct 780  
tt 782

<210> 9  
<211> 5  
<212> DNA  
<213> artificial sequence

<220>  
<223> This is a NEO ribosomal binding site

<400> 9  
tcctc

5